The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for manufacturing a semiconductor device, comprising the steps of:

forming a semiconductor layer over a glass substrate;

forming an insulating layer over the semiconductor layer;

forming an island-like light-absorbing layer over the semiconductor layer with the insulating layer interposed therebetween so that the island-like light-absorbing layer covers the semiconductor layer and end portions of the island-like light-absorbing layer are arranged outside of the semiconductor layer, said island-like light-absorbing layer being capable of absorbing a pulsed light;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the light-absorbing layer through an irradiation of the pulsed light; and

patterning the light-absorbing layer after performing the heat treatment.

2. (Currently Amended) A method for manufacturing a semiconductor device, comprising the steps of:

forming a semiconductor layer over a glass substrate;

forming an insulating [[film]] layer over the semiconductor layer;

forming an island-like light-absorbing layer over the semiconductor layer with the insulating [[film]] layer interposed therebetween so that the island-like light-absorbing layer covers the semiconductor layer and end portions of the island-like light-absorbing layer are arranged outside of the semiconductor layer wherein a transmission factor of a

pulsed light by the island-like light-absorbing layer is 70 percent or less and a transmission factor of the pulsed light by the glass substrate is 70 percent or more;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the light-absorbing layer through [[the]] an irradiation of the pulsed light; and

~~pattering~~ patterning the light-absorbing layer after performing the heat treatment.

3. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over a glass substrate;

forming an insulating layer over the semiconductor layer;

forming an island-like light-absorbing layer over the semiconductor layer with the insulating layer interposed therebetween so that the island-like light-absorbing layer covers the semiconductor layer and end portions of the island-like light-absorbing layer are arranged outside of the semiconductor layer wherein a length of one side of the light-absorbing layer is equal to or less than a thickness of the glass substrate;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the light-absorbing layer through [[the]] an irradiation of [[the]] a pulsed light; and

~~pattering~~ patterning the light-absorbing layer after performing the heat treatment.

4. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor layer over a glass substrate;

forming an insulating layer over the semiconductor layer;

forming and patterning an island-like light-absorbing layer over the semiconductor layer with the insulating layer interposed therebetween so that the island-like light-absorbing layer covers the semiconductor layer and end portions of the

island-like light-absorbing layer are arranged outside of the semiconductor layer, wherein a transmission factor of pulsed light by the island-like light-absorbing layer is 70 percent or less and a transmission factor of the pulsed light by the glass substrate is 70 percent or more;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the light-absorbing layer through [[the]] an irradiation of the pulsed light; and

~~pattering~~ patterning the light-absorbing layer after performing the heat treatment.

5. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming an island-like semiconductor layer over a glass substrate having an insulating surface;

forming [[a]] an island-like light-absorbing layer that overlaps with a whole surface of the semiconductor layer through an insulating layer and whose end portions are arranged outside of the semiconductor layer;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the island-like light-absorbing layer through pulsed light irradiation; and

~~pattering~~ patterning the island-like light-absorbing layer after performing the heat treatment.

6. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a first insulating layer over a glass substrate having an insulating surface;

forming an island-like semiconductor layer over the first insulating layer;

forming a second insulating layer covering a top face and a side face of the semiconductor layer;

forming [[a]] an island-like light-absorbing layer over the second insulating layer, the light-absorbing layer that covers the top face and the side face of the semiconductor layer and whose end portions are arranged outside of the semiconductor layer;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the island-like light-absorbing layer through pulsed light irradiation; and

forming a gate electrode overlapping with the semiconductor layer after performing the heat treatment by forming a metal layer over the island-like light-absorbing layer and then performing an etching step.

7. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming an island-like divided semiconductor layer over a glass substrate;

forming [[a]] an island-like light-absorbing layer that overlaps with a whole surface of the semiconductor layer through an insulating layer and whose end portions are arranged outside of the semiconductor layer;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the island-like light-absorbing layer through a plurality of times of pulsed light irradiation; and

~~pattering~~ patterning the island-like light-absorbing layer after performing the heat treatment.

8. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming an island-like divided semiconductor layer over a glass substrate whose transmission factor of pulsed light emitted from a pulsed light source is 70 percent or more;

forming [[a]] an island-like light-absorbing layer that overlaps with a whole surface of the semiconductor layer through an insulating layer, whose end portions are arranged outside of the semiconductor layer, and whose transmission factor of the pulsed light is 70 percent or less;

performing a heat treatment for the semiconductor layer and the insulating layer by selectively heating the island-like light-absorbing layer through a plurality of times of the pulsed light irradiation; and

~~pattering~~ patterning the island-like light-absorbing layer after performing the heat treatment.

9. (Previously Presented) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8, wherein the light-absorbing layer comprises a metal nitride.

10. (Original) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8, wherein the pulsed light is coherent light.

11. (Original) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8, wherein the pulsed light is coherent light that has a pulse width of from 10 to 100 nanoseconds.

12. (Previously Presented) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8, wherein the pulsed light is non-coherent light that has a pulse width of from 1 to 100 microseconds.

13. (Original) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8, wherein a light source of the pulsed light is a pulsed laser oscillator.

14. (Original) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8, wherein a light source of the pulsed light is a xenon flash lamp.

15. (Canceled)

16. (Currently Amended) A heat treatment method comprising the steps of:

forming ~~and patterning a~~ an island-like light-absorbing layer whose transmission factor of pulsed light is 70 percent or less such that a length of one side of the island-like light-absorbing layer is equal to or less than a thickness of a glass substrate over the glass substrate whose transmission factor of the pulsed light that is emitted from a pulsed light source is 70 percent or more;

providing an object to be heated ~~that is arranged inside of the light-absorbing layer~~ between the glass substrate and the island-like light-absorbing layer so that the island-like light-absorbing layer covers the object to be treated and end portions of the island-like light-absorbing layer are arranged outside of the object to be treated, said island-like light-absorbing layer being capable of absorbing a pulsed light;

performing a heat treatment for the object to be heated by selectively heating a region where the island-like light-absorbing layer is formed, through the pulsed light irradiation; and

~~pattering~~ patterning the island-like light-absorbing layer after performing the heat treatment.

17. (Previously Presented) A heat treatment method according to Claim 16, wherein the light-absorbing layer is a metal nitride.

18. (Previously Presented) A heat treatment method according to Claim 16, wherein the pulsed light is coherent light.

19. (Previously Presented) A heat treatment method according to Claim 16, wherein the pulsed light is coherent light that has a pulse width of from 10 to 100 nanoseconds.

20. (Previously Presented) A heat treatment method according to Claim 16, wherein the pulsed light is non-coherent light that has a pulse width of from 1 to 100 microseconds.

21. (Previously Presented) A heat treatment method according to Claim 16, wherein a light source of the pulsed light is a pulsed laser oscillator.

22. (Previously Presented) A heat treatment method according to Claim 16, wherein a light source of the pulsed light is a xenon flash lamp.

23. (Previously Presented) A method for manufacturing a semiconductor device according to any one of Claims 1 to 8 wherein said island-like light-absorbing layer is formed so as to completely cover the semiconductor layer.

24. (New) A method for manufacturing a semiconductor device according to claim 1 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide,

tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

25. (New) A method for manufacturing a semiconductor device according to claim 2 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

26. (New) A method for manufacturing a semiconductor device according to claim 3 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

27. (New) A method for manufacturing a semiconductor device according to claim 4 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

28. (New) A method for manufacturing a semiconductor device according to claim 5 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

29. (New) A method for manufacturing a semiconductor device according to claim 6 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

30. (New) A method for manufacturing a semiconductor device according to claim 7 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

31. (New) A method for manufacturing a semiconductor device according to claim 8 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide,

tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.

32. (New) A heat treatment method according to claim 16 wherein the island-like light-absorbing layer comprises a material selected from the group consisting of molybdenum, tungsten, titanium, titanium nitride, tantalum nitride, tungsten nitride, tungsten silicide, molybdenum silicide, titanium silicide, tantalum silicide, chromium silicide, cobalt silicide, platinum silicide, and polycrystalline silicon doped with phosphorous or boron and wherein the island-like light-absorbing layer has a thickness of 10nm to 100nm.